What is claimed is:

- 1. An alternator for an automotive vehicle, comprising:
- a rotor;

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- a stator disposed in an opposed relationship with said rotor;
- a frame supporting said rotor and said stator;
- a rectifying device for converting alternating-current output of said stator into direct-current output; and
- a cooling fan for introducing cooling air from an outside via said rectifying device,

wherein said rectifying device is disposed inside said alternator and comprises a small-diameter fin and a large-diameter fin having mutually different polarities and each serving as a cooling member as well as an electric conductive member for a plurality of rectifying elements fixed in receiving holes of respective fins, and a terminal base forming a rectifying circuit of said rectifying elements,

said small-diameter fin and said large-diameter fin, each extending in a direction normal to an axial direction of said rotor, are disposed at both sides of said terminal base so as to be overlapped in the axial direction of said rotor, and said small-diameter fin is disposed far from said rotor compared with said large-diameter fin, and

said small-diameter fin is provided with a plurality of independent ribs each protruding in the axial direction of said rotor and extending in a radial direction of said rotor from or along an opening periphery of said receiving hole of said rectifying element.

- 2. The alternator for an automotive vehicle in accordance with claim 1, wherein said ribs are configured into wavy shape.
- 3. The alternator for an automotive vehicle in accordance with claim 1, wherein said small-diameter fin has a plurality of through holes extending in

the axial direction of said rotor for allowing cooling air to pass and flow toward said large-diameter fin positioned closely to said rotor.

- 4. The alternator for an automotive vehicle in accordance with claim 3, wherein said through holes are provided in the vicinity of bottom portions of said ribs.
- 5. The alternator for an automotive vehicle in accordance with claim 1, wherein an axial thickness of said receiving hole of said small-diameter fin is greater than that of another part of said small-diameter fin.